

## CLAIMS

0095 What is claimed is:

1. A method for effective utilization of data storage capacity using a storage architecture wherein the said storage architecture enables dynamic configuration and segmentation of storage capacity on all or selected nodes on the network system into non-sharable and shared storage capacity segments, said method further based on a percentage of 'total installed capacity' or 'available/unused storage capacity' on said nodes.

0096 2. A method that uses a centralized file server directly in the path of a distributed network file system, wherein the centralized server acts as a host of original data and also as a back-up device.

0097 3. A method for effective utilization of data storage capacity using a storage architecture wherein the said storage architecture makes optimal utilization of network bandwidth and subsystem I/O bandwidth for storing data in a distributed network file system.